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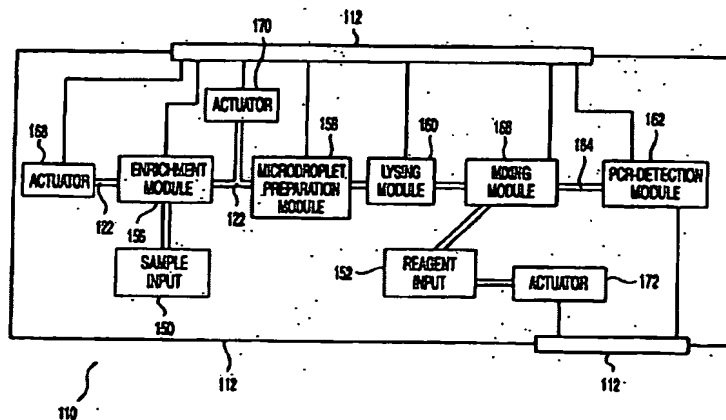
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(54) Title: SYSTEM AND METHOD FOR ELECTROCHEMICAL DETECTION OF BIOLOGICAL COMPOUNDS



(57) Abstract: The present invention relates to an electrochemical method for detecting a target polynucleotide. An electrode comprising an electrode surface is provided. The electrode surface includes at least one probe molecule reversibly immobilized with respect to the electrode surface. A first electrochemical signal indicative of an amount of probe molecule immobilized with respect to the electrode surface is obtained. The electrode surface is contacted with a liquid comprising the target polynucleotide. Upon the contacting step, at least some of the probe molecule immobilized with respect to the electrode surface dissociates therefrom. A second electrochemical signal indicative of an amount of probe molecule immobilized with respect to the electrode surface is obtained. The presence of the target polynucleotide is determined at least partially on the basis of the first and second electrochemical signals.